

## WHAT IS CLAIMED IS:

1. A snowmobile four-cycle engine arrangement, comprising:  
a four-cycle engine arranged in an engine compartment  
formed in the front body of a snowmobile with its crankshaft  
5 laid substantially parallel to the body width and having a  
cylinder portion inclined forwards with respect to the  
vehicle's direction of travel, the engine employing a dry  
sump oil supplying system; and  
an oil tank provided in the engine compartment,  
10 separately from the engine.
2. The snowmobile four-cycle engine arrangement according  
to Claim 1, wherein the oil tank is arranged in front of the  
engine and on the top of a front suspension housing which  
15 is projected upwards from the bottom of the engine compartment.
3. The snowmobile four-cycle engine arrangement according  
to Claim 1, wherein the oil tank is arranged in the rear of  
the engine and on the upper face of a track housing which  
20 is projected upwards from the bottom of the engine compartment.
4. The snowmobile four-cycle engine arrangement according  
to Claim 2, wherein the oil tank is arranged in the rear of  
the engine and on the upper face of a track housing which  
25 is projected upwards from the bottom of the engine compartment.

5. The snowmobile four-cycle engine arrangement according to Claim 1, wherein the engine compartment has an opening port with a mating openable and closable lid element, at its  
5 bottom for creating communication between the inside of the engine compartment and the external space, at a position opposing the bottom of the oil pan of the engine.

6. The snowmobile four-cycle engine arrangement according to Claim 2, wherein the engine compartment has an opening  
10 port with a mating openable and closable lid element, at its bottom for creating communication between the inside of the engine compartment and the external space, at a position opposing the bottom of the oil pan of the engine.

7. The snowmobile four-cycle engine arrangement according to Claim 3, wherein the engine compartment has an opening  
15 port with a mating openable and closable lid element, at its bottom for creating communication between the inside of the engine compartment and the external space, at a position  
20 opposing the bottom of the oil pan of the engine.

8. The snowmobile four-cycle engine arrangement according to Claim 4, wherein the engine compartment has an opening  
25 port with a mating openable and closable lid element, at its

bottom for creating communication between the inside of the engine compartment and the external space, at a position opposing the bottom of the oil pan of the engine.

5        9.    A snowmobile four-cycle engine arrangement, comprising:

         a four-cycle engine having a cylinder head on the top thereof and arranged in an engine compartment formed in the front body of a snowmobile with its crankshaft laid substantially parallel to the body width and its engine body inclined forwards with respect to the vehicle's direction  
10       of travel; and

         an intake path on the upper face of the engine body, characterized in that a heat exchanger for cooling the engine cooling water, engine oil or air to be supplied to the engine  
15       is arranged in the tunnel created inside the body frame for accommodating a track for driving.

         10.   The snowmobile four-cycle engine arrangement according to Claim 9, wherein the heat exchanger is disposed in front  
20       of the track, with respect to the vehicle's direction of travel, inside the tunnel.

         11.   The snowmobile four-cycle engine arrangement according to Claim 9, wherein an intercooler for cooling the air to  
25       be supplied to the engine is put into use as the heat exchanger.

12. The snowmobile four-cycle engine arrangement according to Claim 10, wherein an intercooler for cooling the air to be supplied to the engine is put into use as the heat exchanger.

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13. The snowmobile four-cycle engine arrangement according to Claim 9, wherein an oil cooler for cooling the engine oil is put into use as the heat exchanger.

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14. The snowmobile four-cycle engine arrangement according to Claim 10, wherein an oil cooler for cooling the engine oil is put into use as the heat exchanger.

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15. The snowmobile four-cycle engine arrangement according to Claim 9, wherein a radiator for cooling the engine cooling water is put into use as the heat exchanger.

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16. The snowmobile four-cycle engine arrangement according to Claim 10, wherein a radiator for cooling the engine cooling water is put into use as the heat exchanger.

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17. The snowmobile four-cycle engine arrangement according to Claim 9, wherein an integrated configuration comprised of an oil cooler for cooling the engine oil and a radiator for cooling the engine cooling water is put into use as the

heat exchanger.

18. The snowmobile four-cycle engine arrangement according to Claim 10, wherein an integrated configuration comprised of an oil cooler for cooling the engine oil and a radiator for cooling the engine cooling water is put into use as the heat exchanger.

19. The snowmobile four-cycle engine arrangement according to Claim 13, wherein a thermostat is interposed in the oil path of the oil cooler.

20. The snowmobile four-cycle engine arrangement according to Claim 14, wherein a thermostat is interposed in the oil path of the oil cooler.

21. The snowmobile four-cycle engine arrangement according to Claim 17, wherein a thermostat is interposed in the oil path of the oil cooler.

22. The snowmobile four-cycle engine arrangement according to Claim 18, wherein a thermostat is interposed in the oil path of the oil cooler.